C. F. BAILEY & G. F. PERRENOT.

Ironing and Fluting Machine.

No. 208,283. Patented Sept. 24, 1878.

Fig. 1

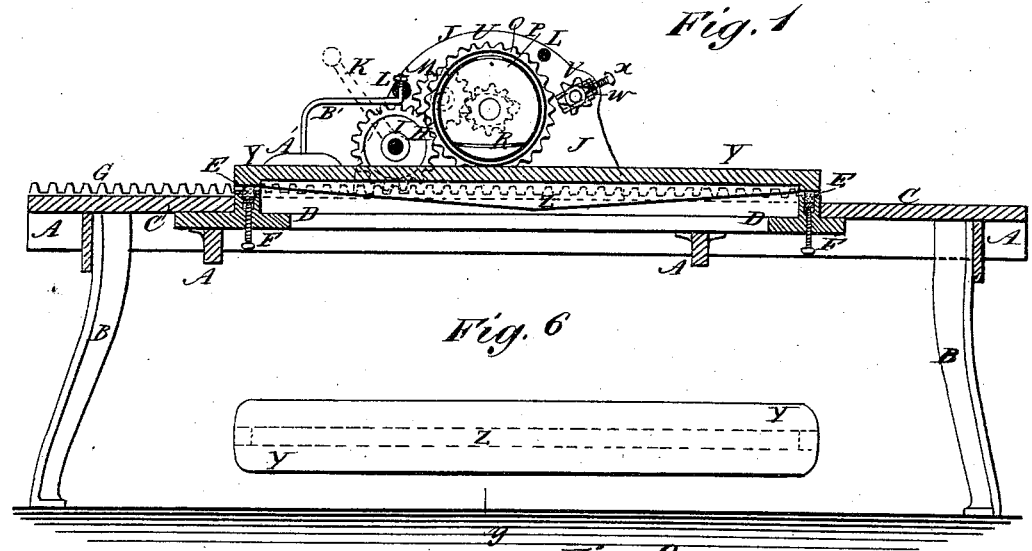


Fig. 6

Fig. 2

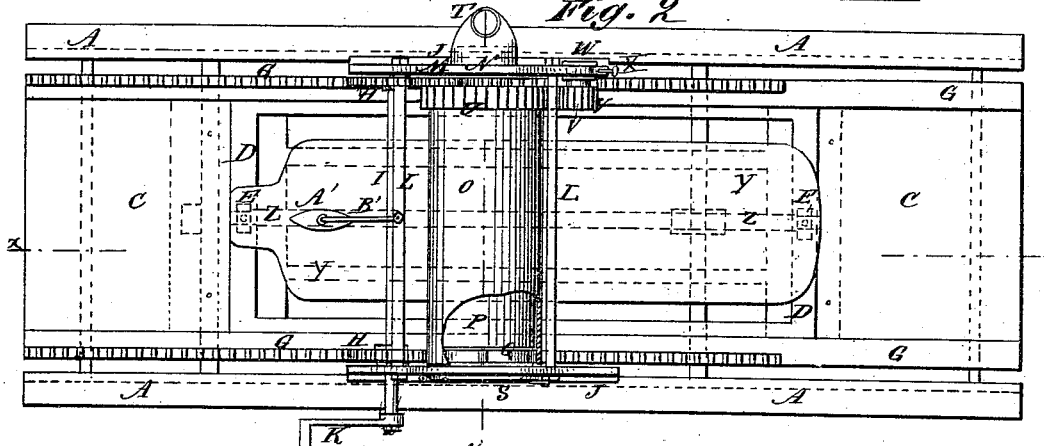


Fig. 4

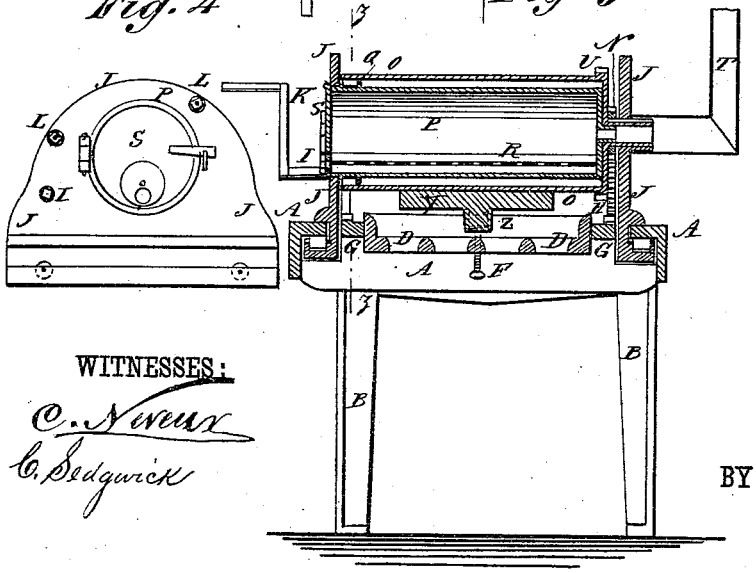
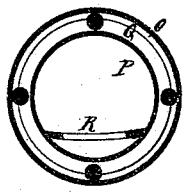


Fig. 3

Fig. 5



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UNITED STATES PATENT OFFICE.

CHARLES F. BAILEY AND GEORGE F. PERRENOT, OF ROCKPORT, TEXAS.

IMPROVEMENT IN IRONING AND FLUTING MACHINES.

Specification forming part of Letters Patent No. **208,283**, dated September 24, 1878; application filed June 13, 1878.

To all whom it may concern:

Be it known that we, CHARLES F. BAILEY and GEORGE F. PERRENOT, of Rockport, in the county of Aransas and State of Texas, have invented a new and useful Improvement in Ironing and Fluting Machines, of which the following is a specification:

Figure 1 is a vertical longitudinal section of our improved machine, taken through the line *x x*, Fig. 2. Fig. 2 is a top view of the same, part being broken away to show the construction. Fig. 3 is a vertical cross-section of the same, taken through the line *y y*, Fig. 2. Fig. 4 is a side view of the carriage. Fig. 5 is a detail cross-section of the concentric cylinders, taken through the line *z z*, Fig. 3. Fig. 6 is a detail view of a modified form of the ironing-board.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved machine for ironing clothes, pressing seams, fluting, &c., which shall be simple in construction and convenient, reliable, and effective in use.

The invention will first be described in connection with the drawing, and then pointed out in the claims.

A is the horizontal frame of the machine, which is provided with legs B, of such a length as to raise the machine to a convenient height. To the cross-bars of the frame A is attached a table, C, in the middle part of which is formed a sunken tray, D, to receive the clothes being operated upon, and which may be made with a slotted bottom. We do not wish to confine ourselves to the flat slotted bottom tray, but reserve the right to make it concave or otherwise, as most desirable.

In the upper edges of the end pieces of the tray D are formed rounded notches, in the bottom of which are formed sockets or recesses, in which are placed rubber blocks E. The rubber blocks E have rounded notches formed in their upper sides, and their height is regulated by hand-screws F, which pass up from the lower side of the said tray and press against the lower side of the said rubber blocks E, the object being to furnish a spring at each end of the board by which any desired pressure may be obtained between the cylinder and ironing-board by the said thumb-screws.

To the cross-bars of the frame A, at the side edges of the table and tray C D, are attached bars G, which have gear-teeth formed upon their upper sides, except for a short distance at one end.

Into the teeth of the rack-bars G mesh the teeth of two gear-wheels, H, attached to the shaft I, which revolves in bearings in the side plates J of the carriage, and to one of its ends is attached the crank K, by means of which the machine is operated.

The side plates J are connected by long bolts or rods L, and upon the outer sides of their lower edges are formed grooves to receive the edges of the flanges formed upon or attached to the side bars of the frame A, which serve as ways for the said carriage to move back and forth upon. Small rollers may be pivoted to the lower shoulder of the groove in the side plates J, to bear against the lower side of the flanges of the side bars of the frame A to diminish the friction as the carriage moves back and forth.

The teeth of one of the gear-wheels H mesh into the teeth of an intermediate gear-wheel, M, pivoted to the inner side of one of the plates J, and the teeth of which mesh into the teeth of the small gear-wheel N attached to the hollow journal of the outer cylinder O. The gearing is so proportioned that the periphery of the outer cylinder may revolve any given number of times faster than its reciprocating motion on the face of the ironing-board, the better to obtain an amount of friction necessary to polish the clothes.

The hollow journal of the outer cylinder, O, revolves in bearings in the side plate J, and within its inner part rests the hollow journal of the inner cylinder, P. The other end of the inner cylinder, P, passes through and is secured to the other plate, J, by means of screws or rivets passing through the collar Q, the better to replace or repair the inner cylinder, as it will be made of sheet metal and will burn out. Upon the inner cylinder, P, at the inner side of the plate J, or upon the plate J, around the inner cylinder, P, is formed, or to it is attached, a collar, Q, upon which rests and revolves the inner surface of the end of the outer

cylinder, O. The friction between the cylinder O and the collar Q may be diminished by small friction-rollers pivoted to the said collar for the said cylinder to rest upon. The inner cylinder, P, is provided with a grate, R, for the fuel to rest upon. The end of the inner cylinder, P, that passes through the plate J, is provided with a hinged door, S, for convenience in putting in the fuel, and which, below the level of the grate R, is provided with a draft-opening regulated by a damper. The inner cylinder, P, may be an entire cylinder, or may have a portion of its upper part cut away, allowing the heat to come in direct contact with a part of the outer cylinder, O.

The cylinders O P may be heated with fuel, gas, or steam, as may be desired. The smoke and other products of combustion pass out through the hollow journals of the cylinders P O, and pass off through the pipe T, which is placed upon a collar attached to the plate J around the hollow journals of the cylinders P O.

To the end of the cylinder O are attached fluting-teeth U, into which mesh the fluting-teeth of a small wheel, V. The fluting-wheel V is pivoted to a block, W, which slides in a slot in the plate J, and is held and adjusted by a hand-screw, X, so that the said fluting-wheel V can be moved into and out of gear with the fluting-teeth U by operating the said hand-screw X.

The clothes are placed to be ironed upon an ironing-board, Y, which has a longitudinal central rib, Z, attached to its under side. The ends of the rib Z are rounded off upon the lower side, and rest upon the rubber blocks E, so that the said board can adjust itself to the varying thickness of the clothes. The ironing-board Y can be further strengthened against splitting by other longitudinal ribs, and by cross-ribs attached to its lower side.

The ironing-board can be made wide, as shown in Figs. 2 and 3, and broad at one end and narrow at the other, as shown in Fig. 2, to adapt it for use in ironing various kinds of garments. For ironing sleeves, pressing seams, &c., the boards Y Z may be made narrow, as shown in Fig. 6, and should be padded upon their upper sides.

A′ is a brush attached to the outer end of an arm, B′, the inner end of which is attached to one of the long bolts L. The brush A′ is designed to smooth out the cloth before the roller, open and smooth down the seam, &c., and may be provided with a device for dampening the cloth.

In using the machine, the clothes to be ironed are spread upon the ironing-board, and the heated cylinder O is rolled forward and back over the said board by operating the crank K in one and then in the other direction.

When the machine is to be used for fluting, the carriage is moved to that end of the table where the racks are without teeth, so that the carriage will not be moved by turning the crank, and is there held by a pin, button, or other suitable device.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. The combination, with the board Y, ribbed on the under side, of tray D, having rounded notches at bottom, and the adjustable rubber blocks E, as and for the purpose described.

2. The fluted wheel V, pivoted to a block, W, adjustable with respect to the cylinder-teeth U, as and for the purpose specified.

3. The combination of the outer rotating cylinder, O, the stationary inner cylinder, P, provided with the grate R, the door S, and the hollow journals, the gear-wheels N M H, and the toothed racks G, with the reciprocating carriage J L and stationary table A B C, substantially as herein shown and described.

4. The combination of the rubber bearings E and the hand-screws F with the tray D, the rounded ends of the rib Z of the ironing-board Y, the rotating cylinder O, and the stationary table A B C, substantially as herein shown and described.

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Witnesses:
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